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CFETP 1A7X1
Parts I-II
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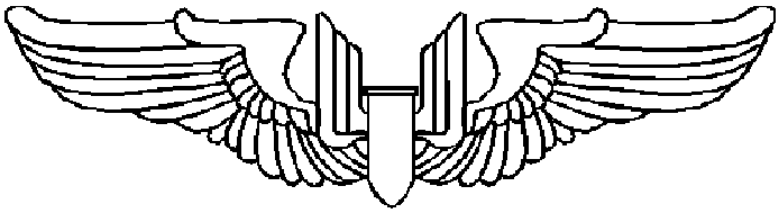
AFSC 1A7X1
AERIAL GUNNER SPECIALTY



CAREER FIELD
EDUCATION AND TRAINING PLAN
(CFETP)

CAREER FIELD EDUCATION AND TRAINING PLAN
AERIAL GUNNER SPECIALTY
AFSC 1A7X1

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OPR: HQ USAF/XOOT (CMSgt Robert C. Shannon)
Approved by: Colonel James J. Brooks
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PART I

Preface

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education and training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP will provide personnel a clear career path to success and instills rigor in all aspects of career field training.

2. The CFETP consists of two parts; both parts of the plan are used by supervisors to plan, manage, and control training within the career field.

2.1. Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan; Section B identifies career progression information, duties and responsibilities, training strategies, and career field path; Section C associates each level with specialty qualifications (knowledge, education, training, and other); Section D indicates resource constraints. Some examples are funds, manpower, equipment, and facilities. Note: AFMAN 36-2108, *Airman Classification,* contains the specialty descriptions.

2.2. Part II includes the following: Section A identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training, Air Education and Training Command (AETC) conducted training, wartime course, core tasks, and correspondence course requirements; Section B contains the course objective list and training standards supervisors will use to determine if airmen satisfied training requirements; Section C identifies available support materials. An example is a qualification training package (QTP) which may be developed to support proficiency training. QTPs identified in this section have been developed to support upgrade/qualification training. These packages are identified in http://afpubs.hq.af.mil, *Numerical Index of Specialized Educational Training Publications*; Section D identifies a training course index, which are used to determine resources available to support training. Included here are both mandatory and optional courses; Section E identifies MAJCOM unique training requirements.

3. This CFETP is designed to ensure individuals in AFSC 1A7X1 receive comprehensive and effective training at the appropriate phases of their career. This plan will enable us to train today's work force for tomorrow's jobs. At unit level, supervisors and trainers use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

ABBREVIATIONS/TERMS EXPLAINED

Advanced Training (AT). Formal course which provides individuals who are qualified in one or more positions of their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of the AFS.

Aircrew Training System (ATS). A comprehensive listing of tasks and objectives to be trained during formal training.

Air Force Career Field Manager (AFCFM). Individual appointed by Air Staff DCS's to manage education, training, and resources for a specific career field(s).

Basic Mission Capable (BMC). An aircrew member who has satisfactorily completed mission qualification training, does not maintain MR/CMR status, but maintains familiarization in the command or unit operational mission. The aircrew member may maintain qualification in some aspects of the unit mission, and is able to attain full qualification in the unit mission within 30 days, or otherwise specified in the applicable MDS-Specific, Volume 1.

Career Development Course (CDC). A self-paced correspondence course designed to upgrade a skill level.

Basic Aerial Gunner (BAG) Course. A flying course designed to cover the fundamentals and applications of basic gunner duties and responsibilities. This course awards AFSC 1A731

Career Field Education and Training Plan (CFETP). A CFETP is a comprehensive, multipurpose document encapsulating the entire spectrum of training for a specialty. It outlines a logical growth path, including training resources, and is designed to eliminate duplication and make training identifiable and budget defensible.

Core Task. A task the AFCFM identify as minimum qualification requirements within an AFSC, regardless of duty position. Core tasks may be specified for a particular skill level or in general across the AFSC. Guidance for using core tasks can be found in the applicable CFETP narrative.

Course Objective Lists (COL). A publication, derived from our initial skills course training standard, identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3-skill level in this career field. Supervisors use the COL to conduct graduate evaluations in accordance with AFI 36-2201, *Developing, Managing, and Conducting Military Training Programs*.

Cockpit/Crew Resource Management (CRM). The effective use of all available resources—people, weapon systems, facilities and equipment, and environment—by individuals or crews to safely and efficiently accomplish an assigned mission or task. The term "CRM" will be used to refer to the training program, objectives, and key skills directed to this end. MAJCOMs may implement their programs as either "cockpit" or "crew" resource management based on their respective missions.

Enlisted Aircrew Undergraduate Course (EAUC). Course designed to screen enlisted aircrew candidates for the rigors of duties associated with flying.

Enlisted Specialty Training (EST). A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade airmen in each skill level of a specialty.

Exportable Training. Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

Initial Skills Training. A formal school course that results in an award of a 3-skill level AFSC.

Instructional System Development (ISD). A deliberate and orderly, but flexible process for planning, developing, validating, implementing, and reviewing instructional programs. It ensures personnel are taught, in a cost efficient way, the knowledge and skills for successful job performance.

MAJCOM/FOA EEFI. Major Command/Field Operating Agency Essential Elements of Friendly Information. Unclassified information that when combined with other information can reveal an insight into classified operations.

MAJCOM Functional Manager (MFM). Individuals appointed by MAJCOMs to manage education, training, and resources for a specific career field(s) for that MAJCOM.

Mission Design Series (MDS). A term used to identify an aircraft, i.e., H-60, H-53, H-1, AC-130

Mission Ready/Combat Mission Ready (MR/CMR). An aircrew member who has satisfactorily completed mission qualification training and maintains qualification and proficiency in the command or unit operational mission.

On-the-Job Training (OJT). Hands-on, over-the-shoulder training conducted to certify personnel in both upgrade (skill level award) and job qualification (duty position certification) training.

Initial Qualification Training (IQT). An aircrew member engaged in training needed to qualify for basic aircrew duties in an assigned position for a specific aircraft, without regard for the command or unit operational mission.

Mission Qualification Training (MQT). An aircrew member engaged in training needed to qualify in an assigned aircrew position to perform the command or unit operational mission.

Continuation Training (CT). An aircrew member engaged in training to maintain and develop a qualification required in Phase I or Phase II training. An aircrew member in Phase III training may be assigned Mission Ready (MR), Mission Capable (MC), or Basic Qualification (BQ) status.

Qualification Training Package (QTP). An instructional course designed for use at the unit to qualify, or aid qualification, in a duty position or program, or on a piece of equipment. It may be printed, computer based, or in other audiovisual media.

Resource Constraints. Resource deficiencies, such as money, facilities, time, manpower, and equipment that preclude desired training from being delivered.

Specialty Training Standard (STS). An Air Force publication that describes skills and knowledge that airman in a particular Air Force specialty need on the job, and identifies the training provided to achieve a 3-, 5-, and 7-skill level within an enlisted AFS. It further serves as a contract between AETC and the functional user to show which of the overall training requirements for an AFSC are taught in formal schools and correspondence courses.

Standard. An exact value, a physical entity, or abstract concept, established and defined by authority, custom, or common consent to serve as a reference, model, or rule in measuring quantities or qualities, establishing practices or procedures, or evaluating results. A fixed quantity or quality.

Total Force. The collective components (active, reserve, guard, and civilian elements) of the United States Air Force.

Weapon System Training Package (WSTP). An instructional course which includes Initial Qualification (IQT), Mission Qualification Training (MQT), Continuation Training (CT) designed for use at the unit to qualify or aid qualification in a duty position, program, or on equipment. It may be printed, computer based, flying, simulator, or other audiovisual material.

Upgrade Training (UGT). Training that leads to the award of a higher skill level in an AFS.

Utilization and Training Workshop (U&TW). A forum of the AFCFM, MAJCOM functional managers, subject matter experts, and AETC/MAJCOM training personnel that determines career ladder training requirements.

Wartime Tasks. Those tasks that must be taught when courses are accelerated in a wartime environment. They are identified in CFEPT Part II, Section A. (STS Column 2, by a / followed by a proficiency code /b). In response to a wartime scenario, these tasks will be taught in the three level courses in a streamlined training environment. These tasks are only for those career fields that still need them applied to their schoolhouse tasks.

Section A - General Information

1. Purpose. This CFETP provides information necessary for the Air Force Career Field Manager (AFCFM), MAJCOM functional managers (MFMs), commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective and efficient career field training program. The plan outlines the training that individuals must receive in order to develop and progress throughout their career. For the purpose of this plan, training is divided into four areas: initial skills, upgrade training (UGT), qualification training (QT), and continuation training (CT). Initial skills training is the Air Force Specialty specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. For this career field, training is provided by AETC at Kirtland AFB, NM. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion required for award of the 3-, 5-, 7-, and 9-skill levels. Qualification training is actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills/knowledge training required for the job. Continuation training is additional training either in-residence or exportable advanced training courses, or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required. The CFETP has several purposes, some are:

1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. Also, it is used to help supervisors identify training at the appropriate point in an individual's career.

1.2. Identifies task and knowledge training requirements for each skill level in this specialty and recommends education/training throughout each phase of an individual's career.

1.3. Lists training courses available in the specialty, identifies sources of training, and the training medium.

1.4. Identifies major resource constraints, which impact full implementation of the desired career field-training program.

2. Uses. The plan will be used by MFMs and supervisors at all levels to ensure a comprehensive and cohesive training programs are available and/or instituted for each individual in the specialty.

2.1. AETC training personnel will develop/revise formal resident, non-resident, field and exportable training based on requirements established by the user and documented in Part II of the CFETP. They will also work with the AFCFM to develop acquisition strategies for obtaining resources needed to provide the identified training.

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial and upgrade skills requirements. OJT, resident training, contract training, or exportable courses can satisfy identified requirements. MAJCOM-developed training to support this AFSC must be identified for inclusion in this plan and must not duplicate available training resources

2.3. Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II will be used as a reference to support training.

2.4. AETC, MAJCOM functional managers, and/or unit training managers develop qualification-training packages (QTP). Unit developed QTPs will be provided to the parent MAJCOM and included in the CFETP.

2.5. Personnel in AFSC 1AXXX are exempt from maintaining OJT Training Folders (AF Form 623). All core tasks identified in this document are satisfied in IQT, MQT, and CT. That training is certified via AF Form 8 by trained instructors and evaluators. Certification of the Form 8 eliminates the requirement to document STS items in this CFETP.

2.6. Unit training personnel according to specific unit of assignment, where needed, will develop the WSTP.

3. Coordination and Approval. The AFCFM is approval authority. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. The AETC Aerial Gunner Program Manager for this specialty will initiate an annual review of this document by AETC and MFMs to ensure currency and accuracy. Using the list of courses in Part II, they will eliminate duplicate training. Applicable inputs/changes to this CFETP will be routed to the 58 TRS/DOA, 1960 Eileen Ave SE, Kirtland AFB, NM 87117-5861.

Section B - Career Progression and Information

4. Specialty Description.

4.1. Specialty Summary. Inspects, operates, and secures armament systems and subsystems, and performs aircrew functions under training, combat, or testing conditions. Instructs unit gunners concerning airborne weapon systems, procedures, and tactics. Related DoD Occupational Subgroup: 646.

4.2. Duties and Responsibilities.

4.2.1. Operates airborne weapon systems and associated equipment. Performs preflight and postflight inspections of guns, defensive systems, and related aircraft equipment. Briefs passengers as required. Participates as a crewmember during training, combat, and test missions. Uses night vision goggles (NVGs) to perform scanner duties in relation to particular aircraft type and mission. Operates aircraft systems, auxiliary, and rescue equipment as dictated by mission requirements. Assists and coordinates with other positions to ensure safe employment of weapons, defensive systems, hoist, and related equipment. Performs aerial gunner functions as dictated by aircraft and mission type during integrated air or ground operations. Maintains munitions account or sub-account and forcasts for ammunition requirements to include flares and small ammunition. Positions and manages ammunition and weapon systems to ensure maximum economy of force. Assists the flight engineer during aircraft emergencies and remote operations.

4.2.2. Performs inflight maintenance of airborne weapons systems and associated equipment. Ensures maximum availability and utilization of weapon systems. Performs all prestrike, strike, and poststrike requirements with special emphasis on malfunction analysis and repair. Applies quick and decisive action to restore malfunctioning systems to operational condition. Conducts thorough airborne analysis and evaluation of weapons and defensive systems and associated equipment. Documents all malfunctions and discrepancies.

4.2.3. Adheres to flying, weapon, and explosive safety standards, conducts inflight and ground training in all facets of aircrew duties, airborne guns, defensive systems, and related equipment.

4.2.4. Plans, organizes, and directs aerial gunner activities. Establishes standards governing safety, work methods, and procedures. Provides resources, equipment, directives, and technical information appropriate to the mission and assigned aircraft. Evaluates operational efficiency of aircrews and systems. Analyzes trends affecting aircrew performance and takes necessary action.

5. Skill/Career Progression. Adequate training and timely progression from the apprentice to the superintendent skill level play an extremely important role in the Air Force's ability to accomplish its mission. Therefore, it is essential that everyone involved in training do their part to plan, develop, manage, conduct and evaluate an effective and efficient training program. The guidance provided in this part of the CFETP will ensure individuals receive viable training at appropriate points in their career. The following narrative and the AFSC 1A7X1-career field flow charts identify the training career path. They define the training required in an individual's career.

5.1. **Apprentice (3) Level.** Initial skills training in this specialty consist of the tasks and knowledge training provided in the 3-skill level resident Basic Aerial Gunner course (BAG) located at Kirtland AFB, NM. Initial skills training requirements will be reviewed during the 1A7X1 Utilization and Training Workshop (16-18 July 2002). The decision to train specific tasks and knowledge items in the initial skill course was based on 1A7X1 subject matter expert (SME) inputs. Task and knowledge training requirements are identified in the specialty training standard, at Part II, Sections A and B. Individuals must complete the initial skill course to be awarded AFSC 1A731

5.2. **Journeyman (5) Level.** Upgrade training to the 5-skill level in this specialty consists of task and knowledge training provided in Career Development Course (CDC) 1A751 and member holding the appropriate grade. Minimum upgrade training; OJT time requirements: 15 months in 5-level OJT, (min of 9 months for retrainees). Meet mandatory requirements listed under the specialty qualifications in AFMAN 36-2108 and CFETP Part I Section C. Be recommended by supervisor

5.3. **Craftsman (7) Level.** Upgrade training to the 7-skill level in this specialty consists of completion of 12 months in 7-level OJT training, and holding the appropriate grade (SSgt).

5.4. **Superintendent (9) Level**. The 9-skill level is awarded upon promotion to SMSgt (SMSgt Sew on). The individual must possess the 7-skill level (ARC are required to complete SNCOA to be promoted to SMSgt). Superintendent can be expected to fill positions such as flight chief, program manager, operations superintendent, and various staff positions through the MAJCOM level. Additional training areas should include budget, manpower, resources and personnel management. Additional personal/professional growth and development should be pursued through continuing education. Completion of professional courses aligned with the career field are strongly recommended.

5.5. **Chief Enlisted Manager (CEM).** CEM code is awarded when selected for promotion to Chief Master Sergeant. In addition to performing duties normally associated with the flying aspects of the AFSC, the CEM is directly responsible for (1) management and supervision of all enlisted personnel training and utilization within their specialty code and/or directorate of responsibility (2) directing performance standardization, qualification, skills training, professional development and enrichment, mentoring, and utilization of enlisted personnel (3) performing evaluations of individual and group performance in terms of effectiveness/efficiency in accordance with Air Force, MAJCOM, and unit instructions/mission requirements (4) Interprets and discusses findings with senior staff and recommends action to correct deficiencies (5) directing day-to-day operations and activities of personnel within their directorate (6) resolving technical problems encountered during mission operations (7) advising organizational senior leadership and staff agencies on issues affecting mission accomplishment. Additionally, CEMs perform staff functions where aircrew operational expertise is required. Additional education and completion of professional development courses are also recommended and encouraged. CEMs can be expected to fill positions such as squadron superintendent, operations group superintendent, section chief, detachment chief, PME school commandant, functional managers and various senior staff positions.

6. Training Decisions. The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Aerial Gunner career field. This CFETP was developed to include life cycle (day one through retirement) training requirements for this specialty. The spectrum includes a strategy for when, where, and how to meet the training requirements. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training. The following training decisions were made at the career field U&TW held at Hurlburt Field, Fl, 16-18 July 2002.

6.1. **Initial Skills Training.**

The STS was revised to provide Principles of Aerodynamics, and Visual Threat Recognition and Avoidance Trainer (VTRAT) familiarization. ORM was also added to the STS, but did not fall under 3 or 5 skill upgrade training.

6.2. **Five-Level Upgrade Training.** No formal changes.

6.3. **Seven-Level Upgrade Training.** No formal changes.

6.4. **Proficiency Training.** STS item 4.1 through 4.5 (Air Force Publications), item 8.2 through 8.8 (Flight Management), and item 10.1 and 10.2 (Aircraft and Equipment Records) added proficiency code "A" to 3-skill level. STS items 13, 14, 15, 1.1.1,17 through 21.2 and 24 (Aircraft Systems), downgraded 5-skill level proficiency codes from "B" to "A". STS items 16.2 through 16.4.3 (Aux systems), 20 (Instrument systems), and 26 (Pressurization/Depressurization systems) proficiency codes deleted (were "B").

7. Community College of the Air Force. Enrollment in CCAF occurs upon completion of basic military training. Off-duty education is a personal choice but is highly encouraged. CCAF provides the opportunity to obtain an Associate in Applied Sciences Degree. As a result of enlisted aviator career field alignment and classification, AFSC 1A7XX (Aerial Gunner) become effective 31 October 2000. The 1A7 AFSC will be eligible for enrollment into the 99-01 Aviation Operations (4VCB) degree program after this date. Aerial Gunners were 2W1X1 personnel working in a special duty flight position and were only eligible for the (4VRY) Aircraft Armament degree program. Those personnel now working/assigned to AFSC 1A7, (Aerial Gunner), may enroll in the Aviation Operations degree program (4VCB). Aerial Gunners cross-training from any other AFSC, to include 2W1XX will be eligible to pursue degree programs for which their secondary AFSC qualifies them and for which they hold at least a 5-skill level. (EXAMPLE): If a member cross-trains into 1A7XX from 2W1XX, he or she is eligible to pursue an Aircraft Armament Degree (4VRY) and then pursue an Aviation Operations degree or vice versa. All subsequent degree rules apply; i.e.12 hours of new technical core, 5-skill level, etc. For further information concerning the Aviation Operations degree program please contact the local education officer or (DFAT2) at 493-5937 for current course information. In addition to its associate degree program, CCAF offers the following:

7.1. **Occupational Instructor Certification.** Upon completion of instructor qualification training, consisting of the instructor methods course and supervised practice teaching, CCAF instructors who possess an associates degree or higher may be nominated by their school commander/commandant for certification as an occupational instructor.

7.2. **Trade Skill Certification.** When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The College uses a competency based assessment process for trade skill certification at one of four proficiency levels: Apprentice, Journeyman, Craftsman/Supervisor, or Master Craftsman/Manager. All are transcribed on the CCAF transcript.

7.3. **Degree Requirements**: See CCAF web site for program details regarding the Associate of Applied Science degree at http://www.au.af.mil/au/ccaf. All airmen are automatically entered into the CCAF program. The 5-skill level must be held at the time of program completion. The following degree requirements come from the 2002-2004 CCAF (4VCB) Aviation Operations degree.

Subject Area	Semester Hrs
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15
Program Elective	15
Total	**64**

7.3.1. **Technical Education** (24 Semester Hours): A minimum of 12 semester hours of Technical Core subjects/courses must be applied and the remaining semester hours applied from Technical Core/Technical Elective subjects/courses. Requests to substitute subjects/courses must be approved in advance by the Technical Branch at CCAF.

7.3.1.1. **Technical Core.**

Subjects/Courses	Semester Hrs
Aerial Gunner Principles/Procedures	24
Aviation/Flight Safety	6
CCAF Internship	18
Flight Rules and Regulations	3
Air Transportation Principles	6
Introduction to Aeronautics/Aviation	3
Survival Training	6

Technical Electives

Subjects/Courses	Semester Hrs
Aerodynamics	3
Aircraft Systems	6
Aircraft Weight and Balance	3
Aviation Law	6
Climatology/Meteorology	6
Private/Commercial Pilot's License	3
Computer Science	6
Electricity/Electronics	6
Enlisted Professional Military Education	6
Human factors in Aviation/Flight Physiology	3
General Chemistry/Algebra-Based Physics	4
Human Relations	3

7.3.2. **Leadership, Management, and Military Studies.** (6 Semester Hours): Professional military education and/or civilian management courses.

7.3.3. **Physical Education**. (4 Semester Hours): This requirement is satisfied by completion of Basic Military Training. PHE 1000.

7.3.4. **General Education**. (15 Semester Hours): Applicable courses must meet the criteria for application of courses to the General Education Requirement (GER) and be in agreement with the definitions of applicable general education subject/courses as provided in the CCAF general catalog.

Subject/Courses	Semester Hrs
Oral Communication Speech	3
Written Communication English Composition	3
Mathematics Intermediate algebra or a college-level mathematics course satisfying delivering institution's mathematics graduation requirement-if an acceptable mathematics course applies as technical or program elective, you may substitute a natural science course for mathematics.	3
Program Elective, a natural science course meeting GER application criteria may be applied as a General Education Requirement	
Social Science Anthropology, Archaeology, Economics, Geography, Government, History, Political Science, Psychology, Sociology	3
Humanities Fine Arts (History, Criticism, and Appreciation), Foreign Language Literature, Philosophy, Religion	3

7.3.5. **Program Elective (15 Semester Hours).** Satisfied with applicable technical education; leadership, management, and military studies; or general education subjects/courses, including natural science courses meeting GER application criteria and foreign language credit earned at the Defense Language Institute or through the Defense Language Proficiency Test. Six semester hours of CCAF degree-applicable technical credit otherwise not applicable to this program may be applied.

7.4. Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an Air Education and Training Command Instructor should be actively pursuing an associate's degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

8. Career Field Flow Charts.

Figure 1. Enlisted Education and Training Path

Figure 2. Aerial Gunner Career Path

Figure 3. 1A7X1 Assignment Locations

Enlisted Career Path

	GRADE REQUIREMENTS

Education and Training Requirements	Rank	Earliest Sew-on	Air Force Average	1A7x1 Average	High Year Tenure (HYT)
Basic Military Training School					
Apprentice Technical School **(3-Skill Level)**	Amn A1C	6 months 16 months			
Upgrade To Journeyman **(5-Skill Level)** - Complete appropriate CDC. - Minimum 15 months OJT (9 months for retrainees) -Recommended by supervisor	SrA	28 months	3 years		10 years
Airman Leadership School (ALS) - Must be a SrA with 48 months time in service or be a SSgt selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only).					
Upgrade To Craftsman (7-Skill Level) - Minimum rank of SSgt select - 12 months OJT - Must be 7-skill level for TSgt sew-on. -Recommended by supervisor	SSgt	3 years	4.7 years	4.9	20 years
Noncommissioned Officer Academy (NCOA) - Must be a TSgt or TSgt selectee. - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only).	TSgt MSgt	5 years 8 years	13.5 years 16.7 years	11.8 15.1	22 years 24 years
USAF Senior NCO Academy (SNCOA) - Must be a MSgt or SMSgt - Resident graduation is a prerequisite for CMSgt sew-on (Active Duty Only).	SMSgt	11 years	19.4 years		26 years
Upgrade To Superintendent (9-Skill Level) - Minimum rank of SMSgt.	CMSgt	14 years	21.3 years	21.5	30 years

Data Current as of May 02

Figure 1

Aerial Gunner Career Path

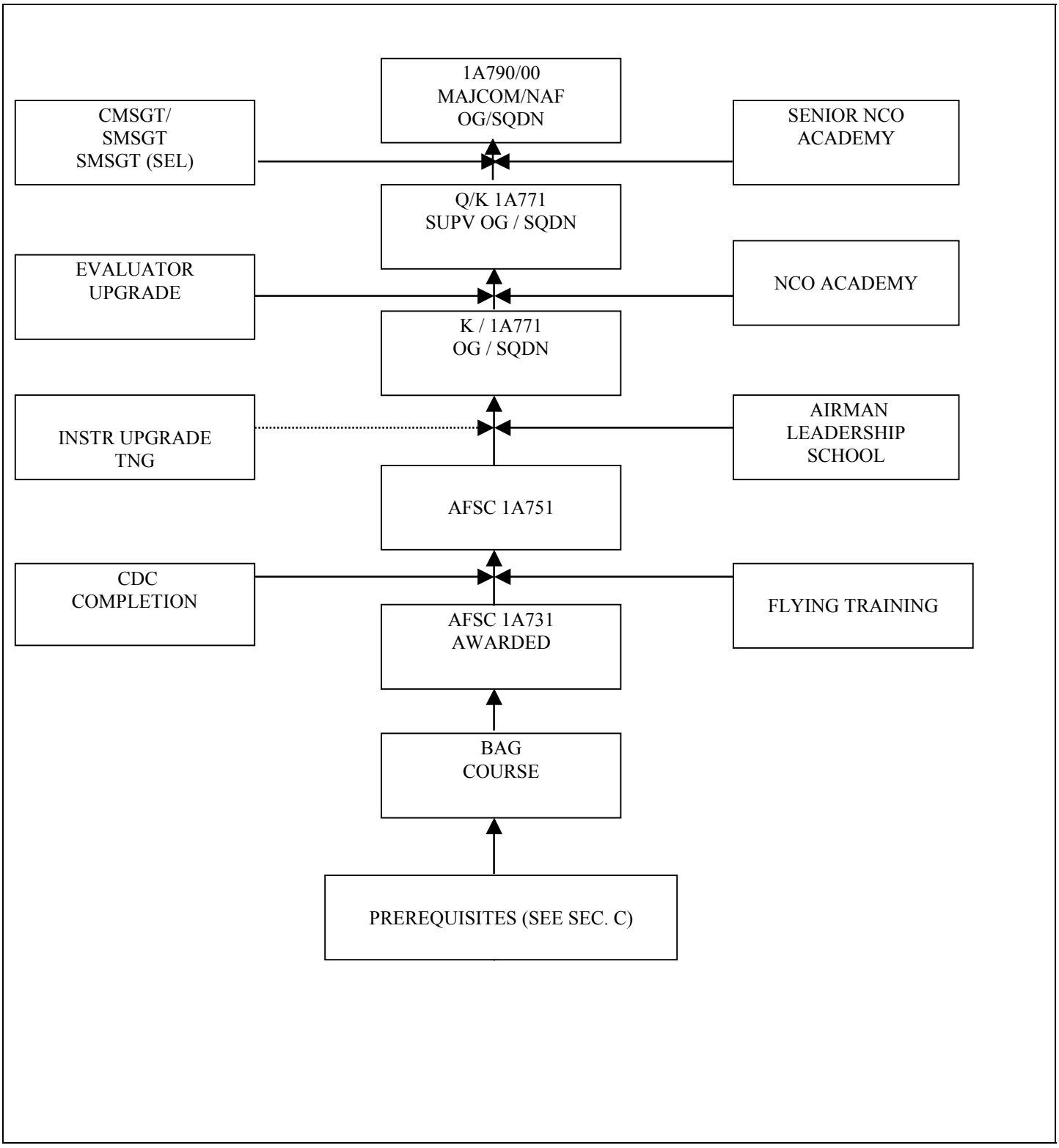

Figure 2

AERIAL GUNNER
Helicopter/Fixed wing Units/Authorization Chart

Command	Installation	Organization	Type	MWS
ACC	Langley AFB VA	MAJCOM	Staff	HH-60G
	Keflavik NAS IC	SQ	Line	HH-60G
	Moody AFB FL	SQ/OG	Line/Staff	HH-60G
	Nellis AFB NV	SQ/OG	Line/Staff	HH-60G
	Nellis AFB NV	TG	Test	HH-60G
AFRES*	Davis-Monthan AFB AZ	SQ	Line	HH-60G
	Patrick AFB FL	SQ	Line	HH-60G
	Portland IAP OR	SQ/OG	Line/Staff	HH-60G
NGB*	Gabreski AP NY	SQ/OG	Line/Staff	HH-60G
	Moffett Fld CA	SQ/OG	Line/Staff	HH-60G
AETC	Randolph AFB TX	NAF	Staff	HH-60G/MH-53M
	Kirtland AFB NM	SQ/OG	Tng/Staff	HH-60G/MH-53M
AFSOC	Hurlburt Fld FL	SQ/MAJCOM	Line/Staff	MH-53M/ AC-130
	Kadena AB JA	OG	Staff	Non-Flying
	Mildenhall UK	SQ	Line	MH-53M
PACAF	Kadena AB JA	SQ/OG	Line/Staff	HH-60G
	Osan AB KO	DET	Line	HH-60G
NGB**	Kulis ANGB AK	SQ/OG	Line/Staff	HH-60G

* Units are ACC Gained.
**Unit is PACAF Gained

Note: The locations and aircraft depicted in this figure are subject to change without notice. This figure is for information only and is only as accurate as of the date the information was collected. Crewmembers wanting information on specific units, locations, and aircraft are encouraged to contact their MAJCOM functional managers.

Figure 3

Section C - Skill Level Training Requirements

9. Purpose. Skill level training requirements in this career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS at Part II, Sections A and B of this CFETP.

10. Specialty Qualifications:

10.1. **Apprentice Level Training:**

10.1.1. **Specialty Qualification**.

10.1.1.1. **Knowledge.** Knowledge is mandatory of: Theory and application of electrical, mechanical, and hydraulic principles as they apply to airborne weapons and allied equipment, components, and systems; employment and care of ammunition and ammunition systems: principle of gun employment and ballistic factors; use of personal equipment, oxygen, and communications systems; aircraft emergency equipment and procedures, gun malfunction analysis and repair; use and interpretation of diagrams, schematics, charts, technical publications and flight manuals.

10.1.1.2 **Education.** For entry into this specialty, completion of high school or general educational development equivalency is mandatory. Also, completion of mechanical or electrical courses is desirable.

10.1.1.3. **Training.** Completion of the EAUC-Enlisted Aircrew Undergraduate Course at Lackland AFB TX is mandatory for active duty pipeline and non-aviation service cross training students. Completion of the Basic Aerial Gunner Course at Kirtland AFB, NM is mandatory for initial award of AFSC 1A731.

10.1.1.4. **Other**. The following are mandatory as indicated:

10.1.1.4.1. For entry, award, and retention of the AFSC:

10.1.1.4.1.1. Physical qualification for aircrew duty according to AFMAN 48-123, *Medical Examination and Standards,* Class III Medical Standards.

10.1.1.4.1.2. Qualification for aviation service according to AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges.*

10.1.1.4.1.3. For award and retention of AFSC 1A731, eligibility for a Secret security clearance according to AFI 31-501, *Personnel Security Management Program*.

10.1.1.4.1.4. Minimum MAGE scores of 55 (mechanical) and 46 (electrical) are mandatory.

10.1.2. **Training Sources and Resources.** Refer to Part II, Section D, and Training Course Index. Completion of Combat Survival Training Course (S-V80) and Water Survival -Parachuting (S-V86) and non-parachuting (S-V90) is mandatory for all 1A7X1 personnel.

10.2. **Journeyman Level Training:**

10.2.1. **Specialty Qualification.** Qualification in and possession of AFSC 1A731.

10.2.1.1. **Knowledge.** In addition to the 3-skill level and other qualifications as listed above and individual must possess the knowledge and skills to complete all tasks with no supervision.

10.2.1.2. **Education.** No additional requirements for entry into this skill level.

10.2.1.3. **Training.** Completion of the following training is mandatory for the award of the 5-skill level:

10.2.1.3.1. Completion of the 5-skill level CDC.

10.2.1.3.2. Completion of the resident and informal training for the assigned weapon system.

10.2.1.3.3. Training must meet core task requirements established in the STS.

10.2.1.4. **Experience.** Qualification in and possession of AFSC 1A731. Also, experience is mandatory in functions such as aircraft and basic performance characteristics, aircraft records maintenance, and weapons systems maintenance and inspections.

10.2.1.5. **Other**. The following are mandatory as indicated:

10.2.1.5.1. For entry, award, and retention of the AFSC:

10.2.1.5.1.1. Physical qualification for aircrew duty according to AFMAN 48-123, *Medical Examination and Standards,* Class III Medical Standards.

10.2.1.5.1.2. Qualification for aviation service according to AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges.*

10.2.1.5.2. For award and retention of AFSC 1A751, eligibility for a Secret security clearance according to AFI 31-501, *Personnel Security Management Program*.

10.2.2. **Training Sources and Resources.** Refer to Part II, Section D, and Training Course Index. Completion of Combat Survival Training Course (S-V80) and Water Survival Parachuting (S-V86) and no-parachuting (S-V90) is mandatory for all active duty 1A7x1 personnel.

10.2.3. **Implementation**. Entry into upgrade training is initiated when an individual possesses the 3-skill level. Qualification training is initiated anytime an individual is assigned duties they are not qualified to perform. CDC 1A751 and QTPs will be completed and awarded the 5-skill level.

10.3. **Craftsman Level Training:**

10.3.1. **Specialty Qualification.** Qualification in and possession of AFSC 1A751.

10.3.1.1. **Knowledge.** In addition to the 5-skill level and other qualifications as listed above, an individual must possess the knowledge and skills necessary to supervise personnel.

10.3.1.2. **Education.** To assume the grade of SSgt and MSgt, individuals must be graduates of the Airman Leadership School (ALS) and NCO Academy, respectively.

10.3.1.3. **Training.** The CSAF has approved a variance eliminating the requirement for in-residence, 7-skill level, training for all 1AXXX (Air Operations career field personnel).

10.3.1.4. **Experience.** Qualification in and possession of AFSC 1A751. Also, experience is mandatory in performing or supervising functions such as Aerial Gunner activities.

10.3.1.5. **Other**. The following are mandatory as indicated:

10.3.1.5.1. For entry, award, and retention of the AFSC:

10.3.1.5.1.1. Physical qualification for aircrew duty according to AFMAN 48-123, *Medical Examination and Standards,* Class III Medical Standards.

10.3.1.5.1.2. Qualification for aviation service according to AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges.*

10.3.1.5.2. For award and retention of AFSC 1A771, eligibility for a Secret security clearance according to AFI 31-501, *Personnel Security Management Program*.

10.3.2. **Training Sources and Resources.** Refer to Part II, Section D, Training Course Index.

10.3.3. **Implementation**. Entry into upgrade training is initiated when an individual possesses the 5-skill level and is in the grade of SSgt. Qualification training is initiated anytime an individual is assigned duties they are not qualified to perform. All QTPs will be completed to be awarded the 7-skill level.

10.4. **Superintendent Level Training**:

10.4.1. **Specialty Qualification.** Qualification in and possession of AFSC 1A771.

10.4.1.1. **Knowledge.** In addition to the 7-skill level qualification, the 9-skill level individual must be an effective leader of personnel and manager of assigned resources. Completion of qualification criteria in currently assigned aircraft is mandatory.

10.4.1.2. **Education.** Completion of CCAF degree is desired.

10.4.1.3. **Training.** Continuation Training courses are available and attendance should be used based on the individual's training needs.

10.4.1.4. **Experience.** Qualification in and possession of AFSC 1A771. Also, experience managing Aerial Gunner functions and activities.

10.4.1.5. **Other**. The following are mandatory as indicated:

10.4.1.5.1. For entry, award, and retention of the AFSC:

10.4.1.5.1.1. Physical qualification for aircrew duty according to AFMAN 48-123, *Medical Examination and Standards,* Class III Medical Standards.

10.4.1.5.1.2. Qualification for aviation service according to AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges.*

10.4.1.5.2. For award and retention of AFSC 1A791, eligibility for a secret security clearance according to AFI 31-501, *Personnel Security Management Program*.

10.4.2. **Training Sources and Resources. N/A**

10.4.3. **Implementation**. The 9-level is awarded at SMSgt sew-on.

Section D - Resource Constraints

11. Purpose. This section identifies known resource constraints, which preclude optimal/desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, office of primary responsibility, are target completion dates. Resource constraints will be reviewed and updated at least annually.

12. Apprentice Level Training:

12.1. **Constraint: Aerial Gunner PTTs for AC-130 training**. Currently, the BAG course has only a 40 MM PTT for hands-on training, and not a 105 MM or 25 MM PTT.

12.1.1**. Impact**: Helicopter and Gunship Aerial Gunner students are not receiving equal hands on training, 105 MM and 25 MM PTTs are necessary to indoctrinate students on the full range of weapons associated with AC-130 operations prior to attending Mission Qualification course.

12.1.2 Resources Required: 105MM, 25MM part task trainers.

12.1.3 Action Required: Pursue funding source for 105 MM and 25 MM PTTs for BAG course at Kirtland AFB, NM.

13. Journeyman Level Training: None identified.

14. Craftsman Level Training: None identified.

PART II

Section A - Specialty Training Standard

1. Implementation. This STS will be used for technical training provided by AETC for classes beginning October 2002.

2. Purpose. As prescribed in AFI 36-2201, this STS:

2.1. Lists in column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for airmen to perform duties at the 3-, 5-, and 7-skill level AFSC in the AERIAL GUNNER Specialty ladder of the Aircrew Operation Career Field. These are based on an analysis of the duties in AFMAN 36-2108. Items in column 1 with an asterisk (*) are the tasks/knowledge items that are trained in the resident wartime course. Column 2 (Core Tasks) identifies, by asterisk (*), specialty-wide training requirements. NOTE: Core task is minimum qualification training required for upgrade to the 5-skill level, but only pertain to or are a function of the work center assigned.

2.2. Shows formal training and correspondence course requirements. Column 3 shows the proficiency to be demonstrated on the job by the graduate as a result of training (in course BAG—PDS Code 1MX—described in (ETCA) and the career knowledge provided by the correspondence course. There is no advanced correspondence course. See AFIADLE/AFSC/CDC listing maintained by the unit OJT manager for current CDC listings.

2.3. Provides certification for OJT. Column 4 is used to record completion of task and knowledge training requirements. Certification is accomplished as outlined in AFI 36-2201.

2.4. **Qualitative Requirements.** Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.

2.5. Becomes a job qualification standard (JQS) for on-the-job training and used according to AFI 36-2201. For OJT, the tasks in column 1 are trained and qualified to the go/no go level. Go means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct use of procedures.

2.6. Is a guide for development of promotion tests used in the Weighted Airmen Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the USAF Occupational Measurement Squadron by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members to be most appropriate for promotion to higher grades. Questions are based on the aerial gunner career development course (CDC). Individual responsibilities are in AFI 36-2606.

3. Recommendations. Report unsatisfactory performance of individual course graduates to 58 TRS/DOA, 1960 Eileen Ave. SE, Kirtland AFB, New Mexico, 87117-5822. Reference specific STS paragraphs.

BY ORDER OF THE SECRETARY OF THE AIR FORCE
OFFICIAL

2 Attachments:
1. Qualitative Requirements
2. Specialty Training Standard

THIS BLOCK FOR IDENTIFICATION PURPOSES ONLY
NAME OF TRAINEE

PRINTED NAME *(Last, First Middle Initial)*	INITIALS *(Written)*	SSAN

PRINTED NAME OF CERTIFYING OFFICIAL AND WRITTEN INITIALS

N/I	N/I
N/I	N/I
N/I	N/I
N/I	N/I
N/I	N/I
N/I	N/I

QUALITATIVE REQUIREMENTS
PROFICIENCY CODE KEY

	SCALE VALUE	DEFINITION: The Individual
	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (EXTREMELY LIMITED)
TASK PERFORMANCE LEVELS	2	Can do most parts of the task. Needs help only on hardest parts. (PARTIALLY PROFICIENT)
	3	Can do all parts of the task. Needs only a spot check of completed work. (COMPETENT)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (HIGHLY PROFICIENT)
	a	Can name parts, tools, and simple facts about the task. (NOMENCLATURE)
*TASK KNOWLEDGE LEVELS	b	Can determine step-by-step procedures for doing the task. (PROCEDURES)
	c	Can identify why and when the task must be done and why each step is needed. (OPERATING PRINCIPLES)
	d	Can predict, isolate, and resolve problems about the task. (ADVANCED THEORY)
**SUBJECT KNOWLEDGE	A	Can identify basic facts and terms about the subject. (FACTS)
	B	Can identify relationship of basic facts and state general principles about the subject. (PRINCIPLES)
	C	Can analyze facts and principles and draw conclusions about the subject. (ANALYSIS)
	D	Can evaluate conditions and make proper decisions about the subject. (EVALUATION)

EXPLANATIONS	
*	A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Examples: b and 1b)
**	A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.
-	This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.
X	This mark is used alone in course columns to show that training is required but not given due to limitations in resources.

Attachment 1

1. Tasks, Knowledge and Technical References	2. Core/ War Time Task	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided		
		A	B	C	D	E	A 3-Skill	B 5-Skill	C 7-Skill
		Trng Start	Trng Finish	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	OJT
1. CAREER LADDER PROGRESSION TR: AFMAN 36-2108									
1.1. Progression in Career Ladder 1A7X1							A	B	
1.2. Duties of AFSC 1A731/5X/7X	*						A	B	
2. SECURITY TR: AFI 10-1101									
2.1. Communications Security (COMSEC) Relating to AFSC 1A7X1							A	B	
2.2. Operations Security (OPSEC) Relating to AFSC 1A7X1	*						A	B	
3. AIR FORCE OCCUPATIONAL SAFETY AND HEALTH (AFOSH) PROGRAM TR: AFI 91-301									
3.1. Practice Personal and Equipment Safety When Servicing Aircraft Systems							-	-	
3.2. Observe Safety Precautions in Areas of:									
3.2.1. Engine air intake and exhaust							A	B	
3.2.2. High intensity sound							A	B	
3.2.3. Rotor /Propeller planes of rotation							A	B	
3.2.4. Antenna radiation							A	B	
3.2.5. Aircraft electrical system							A	B	
3.2.6. Aircraft ground handling							A	B	
3.2.7. High intensity light (strobes)							A	B	
3.2.8. Foreign object damage (FOD)	*						A	B	
3.2.9. Ground support equipment							A	B	
3.2.10. Portable fire extinguishers							A	B	
3.3. AIRCRAFT CONTAINING EXPLOSIVE MATERIALS TR: AFJMAN 24-204; AFMAN 91-201									
3.3.1. Basic Principles							A	B	
3.3.2. Hazards							A	B	
3.3.3. Weapons Safety	*						A	B	

1. Tasks, Knowledge and Technical References	2. Core/ War Time Task	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided		
		A	B	C	D	E	A	B	C
							3-Skill	5-Skill	7-Skill
		Trng Start	Trng Finish	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	OJT
3.3.4. Handling Explosive Loaded Aircraft	*						-	-	
3.3.5. Accident/incident deficiency reports							-	-	
4. AIR FORCE PUBLICATIONS **TR: AFIs 11-215, 37-160, Vol 1; T.O.s 00-5-1, 00-5-2**									
4.1. Use T.O.s							A	B	
4.2. Use Flight Publications	*						A	B	
4.3. Maintain Flight Publications/T.O.'s							A	B	
4.4. Flight Publication Improvement Reports							A	B	
4.5. Use Flight Crew Information File							A	B	
5. SUPERVISION **TR: AFMAN 36-2108; AFI 36-2201**									
5.1. Orient New Personnel							-	-	
5.2. Assign Personnel to additional duties							-	-	
5.3. Plan Work Assignments and Priorities							-	-	
5.4. Schedule Work Assignments							-	-	
5.5. **Establish**									
5.5.1. Work methods							-	-	
5.5.2. Controls							-	-	
5.5.3. Performance standards							-	-	
5.6. Evaluate Work Performance of Subordinate Personnel TR: AFI 36-2403							-	-	
5.7. Resolve Technical Problems for Subordinate Personnel TR: AFI 21-114							-	-	
5.8. Counsel Personnel TR: AFPAM 36-2618							-	-	
5.9. Initiate Action to Correct Substandard Performance by Personnel TR: AFIs 36-2503, 36-2907							-	-	

1. Tasks, Knowledge and Technical References	2. Core/ War Time Task	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided		
		A	B	C	D	E	A	B	C
							3-Skill	5-Skill	7-Skill
		Tng Start	Tng Finish	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	OJT
6. TRAINING **TR: AFMAN 36-2108, AFI 36-2201, ETCA**									
6.1. Evaluate Personnel to Determine Need for Training							-	-	
6.2. Plan and Supervise Training							-	-	
6.3. Maintain Training Records							-	-	
6.4. Evaluate Effectiveness of Training Programs							-	-	
6.5. Recommend Personnel for Training							-	-	
7. PARTICIPATE IN THE USAF GRADUATE EVALUATION PROGRAM **TR: AFI 36-2201**									
8. FLIGHT MANAGEMENT **TR: AFPD 11-4; AFI 11-401**									
8.1. Responsibilities of HQ USAF and MAJCOM's							-	-	
8.2. Flight Authorization							A	B	
8.3. Functions of Unit Flight Management							A	B	
8.4. Flight Documentation							A	B	
8.5. Aircrew Training Program **TR: AFIs 11-402, 11-202,Vol 1**									
8.5.1. Initial qualification training							A	B	
8.5.2 Mission qualification training							A	B	
8.5.3. Continuation training							A	B	
8.5.4. Upgrade training							A	B	
8.6. Aircrew Standardization/Evaluation Program **TR: AFI 11-202, Vol 2**									
8.6.1. Evaluation Form (AF Form 8)							A	B	
8.6.2. Flight Evaluation Folder (FEF)							A	B	
8.7. General Flight Rules TR: AFI 11-202Vol 2							A	B	
8.8. Aviation Service, Aeronautical Ratings, Flight Pay, and Badges TR: AFI 11-402							A	B	

1. Tasks, Knowledge and Technical References	2. Core/ War Time Task	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided		
		A	B	C	D	E	A 3-Skill	B 5-Skill	C 7-Skill
		Trng Start	Trng Finish	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	OJT
9. CONSOLIDATED TOOL KIT PROGRAM									
9.1. Basic Principles							A	B	
10. AIRCRAFT AND EQUIPMENT RECORDS TR: T.O. 00-20 series									
10.1. Use AFTO Form 781 Series							A	B	
10.2. Use AFTO Form 781 (AFORMS) TR: AFI 11-401							A	B	
11. AERODYNAMICS									
11.1. Rotary wing aerodynamics							A	B	
11.2. Fixed wing aerodynamics							A	B	
12. FIXED AND ROTARY WING COMMUNICATIONS SYSTEMS TR: applicable -1									
12.1 Rotary wing communication systems							A	B	
12.2. Fixed wing Intercom							A	B	
12.3. Principles of operation							A	B	
12. 4. System components							A	B	
12.5. Operate							-	-	
12.6. Detect malfunctions TR: applicable –1 T.O.							-	-	
13. AC-130 HH-60, MH-53 Hydraulic Systems TR: applicable -1,									
13.1. Principles of operation							A	A	
13.2. System components							A	A	
13.3. Limitations							A	A	
14. AIRCRAFT LIGHTING SYSTEMS TR: Applicable –1	*								
14.1 Fixed Wing Interior/Exterior Lighting							A	A	
14.1.1. Principle of Operations							A	A	
14.1.2. System Components							A	A	
14.1.3. Operate							-	-	

1. Tasks, Knowledge and Technical References	2. Core/ War Time Task	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided		
		A	B	C	D	E	A 3-Skill	B 5-Skill	C 7-Skill
		Tng Start	Tng Finish	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	OJT
14.1.4. Detect malfunctions/take corrective actions TR: Applicable –1 T.O.							-	-	
14.2 Rotary Wing Interior/Exterior Lighting							A	A	
14.2.1. Principle of Operations							A	A	
14.2.2. System Components							A	A	
14.2.3. Operate							-	-	
14.2.4. Detect malfunctions/take corrective actions TR: Applicable –1 T.O.							-	-	
15. HELICOPTER GENERAL AIRFRAME MH-53/HH-60									
15.1. Helicopter Features TR: Applicable-1 T.O									
15.1.1. Basic construction	*						A	B	
15.1.1.1. Landing Gear Systems TR: applicable -1,							A	A	
15.1.2. Compartment location							A	B	
15.2. Helicopter Ground Handling TR: AFI 11-218; AFOSH STD 127-66; applicable –2-1 T.O									
15.2.1. Tiedown							A	B	
15.2.2. Secure							A	B	
15.2.3. Marshall							A	B	
16. AUXILIARY SYSTEMS TR: applicable -1									
16.1. Rescue Hoist System	*								
16.1.1. Principles of operation							A	B	
16.1.2. System components							A	B	
16.1.3. Limitations							A	B	
16.1.4. Operate							-	-	
16.1.5. Detect malfunctions/take corrective action TR: applicable -1 T.O.							-	-	
16.2. Cargo Sling System									
16.2.1. Principles of operation							A	-	

1. Tasks, Knowledge and Technical References	2. Core/ War Time Task	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided		
		A	B	C	D	E	A 3-Skill	B 5-Skill	C 7-Skill
		Tng Start	Tng Finish	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	OJT
16.2.2. System components							A	-	
16.2.3. Limitations							A	-	
16.3. Fire Extinguisher System									
16.3.1. Principles of operation							A	-	
16.3.2. System components							A	-	
16.3.3. Limitations							A	-	
16.4. APP/APU									
16.4.1. Principles of operation							A	-	
16.4.2. System components							A	-	
16.4.3 Detect Malfunctions							-	-	
17. FLIGHT CONTROL SYSTEMS TR: applicable -1,									
17.1. Principles of operation							A	A	
17.2. System components							A	A	
18. TRANSMISSION AND DRIVE SYSTEMS TR: applicable -1									
18.1. Principles of operation							A	A	
18.2. System components							A	A	
19. ROTOR SYSTEMS TR: Applicable -1									
19.1. Principles of operation							A	A	
19.2. System components							A	A	
19.3. Limitations							-	-	
20. INSTRUMENT SYSTEMS TR: Applicable -1 T.O.									
20.1. Fundamental Principles of operation							A	-	
20.2. System components							A	-	
21. FUEL SYSTEMS TR: Applicable -1									
21.1. Principles of operation							A	A	

1. Tasks, Knowledge and Technical References	2. Core/ War Time Task	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided		
		A	B	C	D	E	A 3-Skill	B 5-Skill	C 7-Skill
		Tng Start	Tng Finish	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	OJT
21.2. System components							A	A	
21.3. Limitations							A	A	
21.4. Service TR: T.O. 00-25-172	*						-	-	
21.4.1. Hot refuel							A	B	
21.4.2. Air refuel TR: See T.O.s 1-1C-1, 1-1C-1-20							A	B	
22. CARGO DOOR (S) /RAMP SYSTEMS AND CARGO LOADING/ TIE DOWN TR: applicable -1	*								
22.1. Principles of operation							A	B	
22.2. System components							A	B	
22.3. Limitations							A	B	
22.4. Operate							-	-	
22.5.. Detect malfunctions/take corrective actions TR: Applicable –1 T.O.							-	-	
23. AC-130 GENERAL TR: Applicable -1	*								
23.1 Basic Construction							A	B	
23.2. Compartment Locations							A	B	
24. OXYGEN SYSTEM TR: applicable –1									
24.1. Principle of Operation							A	A	
24.2. System Components							A	A	
24.3. Operate							-	-	
24.4. Detect malfunctions/take corrective actions TR: Applicable –1 T.O.							-	-	
25. EMERGENCY EQUIPMENT TR: Applicable -1	*								
25.1. Principle of Operations							A	B	
25.2. System Components							A	B	
25.3. Operate							-	-	
25.4. Detect malfunctions/take corrective actions TR: Applicable –1 T.O.							-	-	

1. Tasks, Knowledge and Technical References	2. Core/ War Time Task	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided		
		A	B	C	D	E	A	B	C
							3-Skill	5-Skill	7-Skill
		Trng Start	Trng Finish	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	OJT
26. PRESSURIZATION/DEPRESSURIZATION TR: Applicable –1	*								
26.1. Principle of Operation							-	-	
26.2. System Components							-	-	
26.3. Operate							-	-	
26.4. Detect malfunctions/take corrective actions TR: Applicable –1 T.O.							-	-	
27. AIRCRAFT COUNTERMEASURES TR: applicable -1 T.O.									
27.1. **Electronic Countermeasures (ECM)**	*								
27.1.1. Principles of operation							A	B	
27.1.2. System components							A	B	
27.2. Infrared Countermeasures (IRCM)	*								
27.2.1. Principles of operation							A	B	
27.2.2. System components							A	B	
27.2.3. Operate							-	-	
27.2.4. Detect malfunctions/take corrective actions TR: Applicable –1 T.O.							-	-	
28. AIRCRAFT WEAPONS SYSTEMS TR; T.O.s 11A1,11W series, 33 series, 34 series; applicable –1 T.O.									
28.1. Armament Subsystems									
28.1.1. Rotary-wing Armament Systems							A	B	
28.1.2. Fixed-wing Armament Systems							A	B	
28.2. 7.62MM Gun System GAU-2/B GUN	*								
28.2.1. Nomenclature							A	B	
28.2.2. Cycle of Operation							A	B	
28.2.3. Limitations							A	B	

1. Tasks, Knowledge and Technical References	2. Core/ War Time Task	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided		
		A	B	C	D	E	A 3-Skill	B 5-Skill	C 7-Skill
		Trng Start	Trng Finish	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	OJT
28.2.4. Inspect							-	-	
28.2.5. Operate							-	-	
28.2.6. Detect Malfunctions/Take Corrective Actions TR: Applicable –11W and –1 T.O.							-	-	
28.2.7. Accessories and Chutes							A	B	
28.2.7.1. Inspect							-	-	
28.3. M-240 Machine Gun System	*								
28.3.1. Nomenclature							A	A	
28.3.2. Cycle of Operation							A	A	
28.3.3. Limitations							A	A	
28.3.4. Operate							-	-	
28.3.5. Detect Malfunctions/Take Corrective Action TR: Applicable 11W1, -1 T.O.							-	-	
28.3.6. Accessories and chutes							A	B	
28.3.7.1. Inspect							-	-	
28.4. GAU-18B and M3 .50 Caliber Machine Gun	*								
28.4.1. Nomenclature							A	B	
28.4.2. Cycle of Operation							A	B	
28.4.3. Limitations							A	B	
28.4.4. Inspect							-	-	
28.4.5. Operate							-	-	
28.4.6. Detect Malfunctions/Take Corrective Action TR: Applicable 11W1, -1 T.O.							-	-	
28.4.7. Accessories and Chutes							A	B	
28.4.7.1. Inspect							-	-	
28.5. GAU-12U 25MM Gun System	*								
28.5.1. Nomenclature							A	B	
28.5.2. Cycle of Operation							A	B	

1. Tasks, Knowledge and Technical References	2. Core/ War Time Task	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided		
		A	B	C	D	E	A 3-Skill	B 5-Skill	C 7-Skill
		Tng Start	Tng Finish	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	OJT
28.5.3. Limitations							A	B	
28.5.4. Inspect							-	-	
28.5.5. Operate							-	-	
28.5.6. Detect Malfunctions/Take Corrective Action TR: Applicable 11W1, -1 T.O.							-	-	
28.6. M2A1 40MM Gun System	*								
28.6.1. Nomenclature							A	B	
28.6.2. Cycle of Operations							A	B	
28.6.3. Limitations							A	B	
28.6.4. Inspect							-	-	
28.6.5. Operate							-	-	
28.6.6. Detect Malfunctions/Take Corrective Action TR: Applicable 11W1, -1 T.O.							-	-	
28.7. 105MM Gun System	*								
28.7.1 Nomenclature							A	B	
28.7.2 Cycle of Operation							A	B	
28.7.3 Limitations							A	B	
28.7.4 Inspect							-	-	
28.7.5 Operate							-	-	
28.7.6 Detect Malfunctions/Take Corrective Action: TR: Applicable 11W1,-1 T.O.							-	-	
28.8 Trainable Gun Mounts (TGM)	*								
28.8.1 Nomenclature							A	B	
28.8.2 Normal Operation							A	B	
28.8.3 Inspect							-	-	
28.8.4 Operate							-	-	
28.8.5 Detect Malfunctions/Take Corrective Action: TR: Applicable 11W1,-1 T.O.							-	-	

1. Tasks, Knowledge and Technical References	2. Core/ War Time Task	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided		
		A	B	C	D	E	A	B	C
							3-Skill	5-Skill	7-Skill
		Trng Start	Trng Finish	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	OJT
28.9. Ammunition Storage Handling Systems (ASHS)	*								
28.9.1. Nomenclature							A	B	
28.9.2. Normal Operation							A	B	
28.9.3. Limitations							A	B	
28.9.4. Inspect							-	-	
28.9.5. Operate							-	-	
28.9.6. Detect Malfunctions/Take Corrective Action: Applicable 11W1, -1 T.O.							-	-	
29. AMMUNITION TR: Applicable TO's/Instructions	*								
29.1 Safety Precautions							A	B	
29.2. Classifications							A	B	
29.3. Types							A	B	
29.4. Inspect							-	-	
29. 5. Upload/Download							-	-	
29.6. Emergency Actions	*						-	-	
30. PYROTECHNICS TR: AFMAN 91-201; T.O. 11A series	*								
30.1. Safety Precautions							A	B	
30.2. Classification							A	B	
30.3. Types							A	B	
30.4. Inspect							A	B	
30.5. Load							-	-	
30.6. Arm/De-Arm							-	-	
30.7. Deploy							-	-	
30.8. Emergency Actions	*						-	-	

1. Tasks, Knowledge and Technical References	2. Core/ War Time Task	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided		
		A	B	C	D	E	A 3-Skill	B 5-Skill	C 7-Skill
		Tng Start	Tng Finish	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	OJT
31. ALTERNATE INSERTION/EXTRACTION and LOADING TR: Applicable MAJCOM instructions Vol. 3, Vol. 24	*								
31.1. Equipment							A	B	
31.2. Principles of Operation							A	B	
31.3. Inspection							-	-	
32. SCANNER DUTIES	*								
32.1 Threat Analysis							A	A	
32.2. Visual Threat Recognition Trainer (VTRAT)							A	-	
33. CREW RESOURCE MANAGEMENT (CRM)							-	-	
34. OPERATIONS RESOURCE MANAGEMENT (ORM)							-	-	
35. GROUND AND INFLIGHT EMERGENCY PROCEDURES TR: APLLICABLE –1 T.O.									
35.1. Detect Emergency Conditions/System Malfunctions							-	-	
35.2. Demonstrate Crew Coordination							-	-	
36. CARGO AND PASSENGERS									
36.1. Perform Cargo Inspection							-	-	
36.2. Perform Passenger Inspection							-	-	
36.3. Brief Passengers							-	-	
36.4. Load and Unload									
36.4.1. Cargo							-	-	
36.4.2. Passengers							-	-	
36.4.3. Litters							-	-	
37. STANDARD ELECTRONIC FUNDEMENTALS									
37.1. Basic Terms									
37.1.1 DC Terms							A	B	
37.1.2. AC Terms							A	B	

1. Tasks, Knowledge and Technical References	2. Core/ War Time Task	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided		
		A	B	C	D	E	A 3-Skill	B 5-Skill	C 7-Skill
		Trng Start	Trng Finish	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	OJT
37.2. Circuit Breakers									
37.2.1. Types							A	B	
37.2.2. Theory of Operation							A	B	
37.3. Switches									
37.3.1. Types							A	B	
37.3.2. Theory of Operation							A	B	
37.4. Aircraft Electrical Systems TR: Applicable –1	*								
37.4.1. Principle of Operations							A	B	
37.4.2. System Components							A	B	
37.4.3. Operate							-	-	
37.4.4. Detect malfunctions/take corrective actions TR: Applicable –1 T.O.							-	-	
38. PERSONAL EQUIPMENT	*								
38.1 Vest							A	B	
38.2. Helmet							A	B	
38. 3. Night Vision Goggles (NVGs)							A	B	
38.3.1 Types							A	B	
38.4. Communications Headset							A	B	
39. Map Reading									
39.1. Basic facts							-	A	

Section B - Course Objective List

4. Measurement. Each objective is indicated as follows: **W** indicates task or subject knowledge which is measured using a written test, **PC** indicates required task performance which is measured with a performance progress check, and **PC/W** indicates separate measurement of both knowledge and performance elements using a written test and a performance progress check.

5. Standard. The standard is 85% on written examinations. Standards for performance measurement are indicated in the objective and delineated on the individual progress checklist. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained.

6. Proficiency Level. The tasks performance factors in Block I, Block II and Block III are taught to the "A" level which means the students can identify basic facts and terms about the subject. The student can also explain step-by-step procedures for doing the task.

7. Course Objective. These objectives are listed in the sequence taught by block of instruction. Underlined STS elements show where the training is closed-out for the level indicated.

7.1. **Initial Skills Course: Terminal Objectives**

7.1.1. **Block I.**

7.1.1.1. Define progression in career ladder 1A7X1 and the duties of AFS 1A731/5X/7X/9X. STS: 1.1. Measure: W

7.1.1.2. Recall the basic duties of Aerial Gunners. STS: 1.2. Measure W

7.1.1.3. Define the COMSEC/OPSEC Program and the procedures to report security. STS: 2.1, 2.2. Measure: W

7.1.1.4. Recall basic principles and use of associated Publications. STS. 4.1, 4.2, 4.3, 4.4, 4.5.

7.1.1.5. Recognize specifics hazards associated with a flight line. STS: 3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.2.5, 3.2.6, 3.2.7, 3.2.8, 3.2.9, 3.2.10. Measure: W

7.1.1.6. Recognize specific hazards associated with handling explosives. STS: 3.3.1,3.3.2,3.3.3. Measure: W

7.1.2.7. Recall the procedures used while performing aircrew-scanning duties. STS: 32.1,32.2. Measure W

7.1.1.8 Recall the basic principles of Flight Management. STS 8.2, 8.3, 8.4, 8.5.1, 8.5.2, 8.5.3, 8.5.4, 8.6.1, 8.6.2, 8.7, 8.8.

7.1.1.9. Recall the basic principles of Aircraft and Equipment Records. STS 10.1, 10.2. Measure: W

7.1.1.10. Identify equipment and uses involved with personal life support equipment. STS: 38.1, 38.2, 38.3, 38.3.1, 38.4. Measure W

7.1.2. **Block II.**

7.1.2.1. Define basic principles of CTK prevention programs. STS: 9.1. Measure: W

7.1.2.2. Identify basic principles concerning electrical theory. STS: 37.1.1, 37.1.2, 37.2.1, 37.2.2, 37.3.1, 37.3.2, 37.4.1, 37.4.2. Measure W

7.1.2.4. Recall basic construction, compartment location, and aerodynamics of the AC-130 airframe. STS: 23.1, 23.2, 11.2,

7.1.2.6. Given a static MH-53 aircraft, identify basic construction and compartment locations. STS: 15.1.1, 15.1.2. Measure W

7.1.2.7. Given a static HH-60 aircraft, identify basic construction and compartment locations. STS: 15.1.1, 15.1.2. Measure W

7.1.2.8. Identify basic principles of the AC-130 oxygen systems. STS: 24.1, 24.2. Measure W

7.1.2.9. Identify basic principles of the AC-130 intercom systems. STS: 12.2, 12.3, 12.4. Measure W

7.1.2.10. Recall the operating principles and components of aircraft countermeasure equipment. STS: 27.1.1, 27.1.2, 27.2.1, 27.2.2. Measure W

7.1.2.11. Recall basic construction, compartment location, and aerodynamics of the MH-53 airframe. STS: 15.1.1, 15.1.2, 11.1. Measure W

7.1.2.12. Recall basic construction, compartment location, and aerodynamics of the HH-60 airframe. STS: 15.1.1, 15.1.2, 11.1. Measure W

7.1.2.13 . Recall the procedures used in helicopter ground handling. STS: 15.2.1, 15.2.2, 15.2.3. Measure W

7.1.2.14 . Recall the principle of operations and system components of AC-130 Emergency Equipment. STS: 25.1, 25.2. Measure W

7.1.2.15 . Identify equipment and principles of operation of Alternate Insertion/Extraction. STS: 31.1, 31.2. Measure W

7.1.2.16 Recall basic principles and components Cargo Door/Ramp Systems and Cargo Loading/ Tie Down. STS: 22.1, 22.2, 22.3 Measure W

7.1.2.17 . Recall basic principles and components of Hydraulic Systems. STS: 13.1, 13.2, 13.3, Measure W

7.1.2.18 . Recall principles of operation and system components for Helicopter Landing Gear systems. STS: 15.1.1.1 Measure W

7.1.2.19 Recall principles of operation, system components, and limitations for Helicopter Auxiliary systems. STS: 16.1.1, 16.1.2, 16.1.3, 16.2.1, 16.2.2, 16.2.3, 16.3.1, 16.3.2, 16.3.3, 16.4.1, 16.4.2. Measure W

7.1.2.20 . Recall principles of operation, system components, and limitations of Helicopter Flight Control systems. STS: 17.1, 17.2. Measure W

7.1.2.21 . Recall principles of operation, system components, and limitations of Helicopter Transmission and Drive systems. STS: 18.1, 18.2. Measure W

7.1.2.22 Recall principles of operation, system components, and limitations of Rotor systems. STS: 19.1, 19.2, 19.3. Measure W

7.1.2.23 . Recall principles of operation, system components of Instrument systems. STS: 20.1, 20.2. Measure W

7.1.2.24 . Recall principles of operation, system components, and limitations and servicing of Helicopter Fuel systems. STS: 21.1, 21.2, 21.3, 21.4.1, 21.4.2. Measure W

7.1.2.25 . Recall principles of operation and system components of Helicopter Communication systems. STS: 12.1, 12.2,12.3, 12.4. Measure W

7.1.2.26 . Recall principles of operation and system components of Aircraft Lighting systems. STS: 14.1.1, 14.1.2, 14.2, 14.2.1, 14.2.2, 14.1. Measure W

7.1.2.27

7.1.3. **Block III**

7.1.3.1. Recall the nomenclature, cycle of operation and limitations of M-240 machine gun. STS: 28.3.1, 28.3.2, 28.3.3. Measure W

7.1.3.2. Recall the basic facts concerning the .50 caliber machine gun nomenclature, cycle of operation, and limitations. STS: 28.4.1, 28.4.2, 28.4.3, 28.4.7. Measure W

7.1.3.3. Recall the uses of pyrotechnics and safety features. STS: 30.1, 30.2, 30.3, 30.4. Measure W

7.1.3.4. Recall the basic safety features and functions of ammunition . STS: 29.1, 29.2, 29.3. Measure W

7.1.3.5. Recall basic principles of fixed wing armament systems. STS: 28.1.2. Measure W

7.1.3.6. Recall the basic principles of rotary wing armament systems. STS: 28.1.1. Measure W

7.1.3.7. Recall the basic facts concerning the GAU-2/B mini gun nomenclature, cycle of operation, and limitations. STS: 28.2.1, 28.2.2, 28.2.3, 28.2.7. Measure W

7.1.3.8. Recall the basic facts concerning the 25MM Gatling gun nomenclature, cycle of operation, and limitations. STS: 28.5.1, 28.5.2, 28.5.3. Measure W

7.1.3.9. Recall the basic facts concerning the 40MM gun nomenclature, cycle of operation, and limitations. STS: 28.6.1, 28.6.2, 28.6.3. Measure W

7.1.3.10. Recall the basic facts concerning the 105MM-gun nomenclature, cycle of operation, and limitations. STS: 28.7.1, 28.7.2, 28.7.3. Measure W

7.1.3.11 Recall the basic facts concerning Trainable Gun Mounts nomenclature and normal operations. STS 28.8.1, 28.8.2. Measure W

7.1.3.12 Recall the basic facts concerning Ammunition Storage Handling Systems. STS 28.9.1, 28.9.2, 28.9.3. Measure W

7.2. **Advanced Skills Course:**

NOTE: There is currently no advanced course. This area is reserved.

Section C - Support Material

NOTE: There are currently no support material requirements. This area is reserved.

Section D - Training Course Index

9. Purpose. This section of the CFETP identifies training courses available for the specialty and shows how the courses are used by each MAJCOM in their career field training programs.

10. Air Force In-Residence Courses.

COURSE NUMBER	COURSE TITLE	LOCATION
J3AQR1A711 001	Aerial Gunner Helper-EAUC	Lackland AFB, TX
S-V80-A	Combat Survival Training	Fairchild AFB, WA
S-V84-A	Underwater Egress Training	Fairchild AFB, WA
S-V86-A	Water Survival Training Course	Pensacola NAS, FL
BAG	Basic Aerial Gunner Course	Kirtland AFB, NM
MH53MAGMQ	MH-53M Aerial Gunner Mission Qualification	Kirtland AFB, NM
MH53MAGSR	MH-53M Aerial Gunner Simulator Refresher	Kirtland AFB, NM
HH60GAGMQ	HH-60G Aerial Gunner Mission Qualification	Kirtland AFB, NM
AC-130HMQ	AC-130H Aerial Gunner Mission Qualification	Hurlburt Fld, FL
AC-130UMQ	AC-130U Aerial Gunner Mission Qualification	Hurlburt Fld, FL

12. Advanced Training.

COURSE NUMBER	COURSE TITLE	LOCATION
AFSOC 155000	Introduction to Special Operations Course	Hurlburt Fl.
FIP	Flight Instructor Preparatory Course	Kirtland AFB
HH60GAGIQ	HH-60G Aerial Gunner Instructor Qualification	Kirtland AFB, NM
MH53MAGIQ	MH-53M Aerial Gunner Instructor Qualification	Kirtland AFB, NM
AC-130HIQ	AC-130H Aerial Gunner Instructor Qualification	Hurlburt Fld, FL
AC-130UIQ	AC-130U Aerial Gunner Instructor Qualification	Hurlburt Fld, FL

12. Other Courses in the Field.

COURSE NUMBER	COURSE TITLE	USER
	Aerial Gunner Flight Examiner	MAJCOM
	Aerial Gunner Refresher Course	MAJCOM

13. Air Force Institute for Advanced Distance Learning (AFIADL) Courses.

COURSE NUMBER	COURSE TITLE
CDC 1A751	Aerial Gunner Journeyman

Section E - MAJCOM Unique Requirements

Aerial gunners are required to complete initial and recurring training events for their primary assigned aircraft. Refer to Air Force Instructions, MAJCOM, and Multi-Command Instructions series for additional information on these requirements. Additionally, to maintain qualification and proficiency, aerial gunners will accomplish the flying currency requirements identified in AFI 11-202, Vol 2, as supplemented by MAJCOMs.